

Title (en)

Electric-component mounting method and apparatus

Title (de)

Bestückungsverfahren und Bestückungsvorrichtung für elektrisches Bauteil

Title (fr)

Méthode et appareil de montage d' un composant électrique

Publication

EP 1161131 A2 20011205 (EN)

Application

EP 01304843 A 20010601

Priority

JP 2000164958 A 20000601

Abstract (en)

A method of mounting an electric component (94; 714) on a circuit substrate (350; 704), including the steps of moving one of a suction nozzle (90; 700; 866) and an electric-component supplying device (122; 710, 712) toward the other of the nozzle and the supplying device, so that the nozzle applies a suction to the component supplied by the supplying device and thereby receives the component, moving one of the nozzle and the substrate toward the other of the nozzle and the substrate, so that the nozzle mounts the component on the substrate, taking an image of at least a portion of the component held by the nozzle, as seen in a direction perpendicular to an axial direction of the nozzle, in a state in which the nozzle takes a known position in the axial direction, determining, based on image data representing the taken image, a position of a mounted surface (98) of the component that is opposite to a sucked surface (92) of the component sucked by the nozzle, and controlling, based on the determined position, a movement of the nozzle toward one or each of the supplying device and the substrate, or vice versa. <IMAGE>

IPC 1-7

H05K 13/04

IPC 8 full level

B25J 9/10 (2006.01); **B25J 13/08** (2006.01); **H05K 13/04** (2006.01); **H05K 13/08** (2006.01)

CPC (source: EP US)

H05K 13/041 (2018.07 - EP US); **H05K 13/0812** (2018.07 - EP US); **Y10T 29/49131** (2015.01 - EP US); **Y10T 29/53091** (2015.01 - EP US); **Y10T 29/53178** (2015.01 - EP US); **Y10T 29/53191** (2015.01 - EP US)

Citation (applicant)

US 5878484 A 19990309 - ARAYA SHINICHI [JP], et al

Designated contracting state (EPC)

DE FR GB IT NL

DOCDB simple family (publication)

EP 1161131 A2 20011205; **EP 1161131 A3 20020724**; **EP 1161131 B1 20110810**; JP 2001345599 A 20011214; JP 4399088 B2 20100113; US 2001047586 A1 20011206; US 6507997 B2 20030121

DOCDB simple family (application)

EP 01304843 A 20010601; JP 2000164958 A 20000601; US 86343101 A 20010524